

Figure 1
{2.1-kb SAMS - GUS - NOS 3'} region from pZSL12

Figure 1 (continued)

tttcttctcc ctctacaaaa tcttagattc cgtggttcaa tttcggatct tgcacttctg	1620
gtttgctttg ccttgctttt tcttcaactg ggtccatcta ggatccatgt gaaactctac	1680
tctttcttta atatctgcgg aatacgcgtt ggactttcag atctagtcga aatcatttca	1740
taattgcctt tctttctttt agcttatgag aaataaaaac actttttttt tatttcaaaa	1800
taaaccttgg gccttgtgct gactgagatg gggtttggtg attacagaat tttagcgaat	1860
tttgtaattg tacttgtttg tctgtagttt tgttttggtt tcttgtttct catacattcc	1920
ttaggcttca attttattcg agtataggtc acaataggaa ttcaaacttt gagcagggga	1980
attaatccct tcttcaaat ccagtttggt tgtatatatg tttaaaaaat gaaacttttg	2040
ctttaaattc tattataact ttttttatgg ctgaaatttt tgcagtgtgc tttgctctct	2100
gttgtaaatt tactgtttag gtactaactc taggcttggt gtgcagtttt tgaagtataa	2160
ccatggtacg tctgtagaa accccaaccc gtgaaatcaa aaaactcgac ggctgtggg	2220
cattcagtct ggatcgcgaa aactgtgga ttgatcagcg ttggtgggaa agcgcgttac	2280
aagaaagccg ggcaattgct gtgccaggca gttttaacga tcagttcgcc gatgcagata	2340
ttcgtaatga tgcgggcaac gtctggtatc agcgcgaagt ctttataccg aaaggttggg	2400
caggccagcg tatcgtgctg cgtttcgatg cggtcactca ttacggcaaa gtgtgggtca	2460
ataatcagga agtgatggag catcagggcg gctatacgcc atttgaagcc gatgtcacgc	2520
cgtatgttat tgccgggaaa agtgtacgta tcaccgtttg tgtgaacaac gaactgaact	2580
ggcagactat cccgccggga atggtgatta ccgacgaaaa cggcaagaaa aagcagtctt	2640
acttccatga tttctttaac tatgccggaa tccatcgag cgtaatgctc tacaccacgc	2700
cgaacacctg ggtggacgat atcaccgtgg tgacgcatgt cgcgcaagac tgtaaccacg	2760
cgtctgttga ctggcaggtg gtggccaatg gtgatgtcag cgttgaactg cgtgatgcgg	2820
atcaacaggt ggttgcaact ggacaaggca ctagcgggac tttgcaagtg gtgaatccgc	2880
acctctggca accgggtgaa ggttatctct atgaactgtg cgtcacagcc aaaagccaga	2940
cagagtgtga tatctacccg cttcgcgtcg gcatccggtc agtggcagtg aagggccaac	3000
agttcctgat taaccacaaa ccgttctact ttactggctt tggtcgtcat gaagatgcgg	3060
acttaoctgg caaaggattc gataacgtgc tgatggtgca cgaccacgca ttaatggact	3120
ggattggggc caactcctac cgtacctcgc attaccctta cgctgaagag atgctcgact	3180

Figure 1 (continued)

gggcagatga acatggcatc gtggtgattg atgaaactgc tgctgtcggc tttaacctct	3240
ctttaggcat tggtttcgaa gcgggcaaca agccgaaaga actgtacagc gaagaggcag	3300
tcaacgggga aactcagcaa gcgcacttac aggcgattaa agagctgata gcgcgtgaca	3360
aaaaccaccc aagcgtggtg atgtggagta ttgccaacga accggatacc cgtccgcaag	3420
tgcacgggaa tatttcgcca ctggcggaag caacgcgtaa actcgaccgc acgcgtccga	3480
tcacctgcgt caatgtaatg ttctgcgacg ctacacaccga taccatcagc gatctctttg	3540
atgtgctgtg cctgaaccgt tattacggat ggtatgtcca aagcggcgat ttggaaacgg	3600
cagagaaggt actggaaaaa gaacttctgg cctggcagga gaaactgcat cagccgatta	3660
tcataccgga atacggcgtg gatacgtag cggggctgca ctcaatgtac accgacatgt	3720
ggagtgaaga gtatcagtgt gcatggctgg atatgtatca ccgcgtcttt gatcgcgtca	3780
gcgcgcgtcgt cggatgaacag gtatggaatt tcgccgattt tgcgacctcg caaggcatat	3840
tgcgcgttgg cggtacaacg aaagggatct tactcgcga ccgcaaaccg aagtcggcgg	3900
cttttctgct gcaaaaacgc tggactggca tgaacttcgg tgaaaaaccg cagcagggag	3960
gcaaacaatg aatcaacaac tctcctggcg caccatcgtc ggctacagcc tcggtgggga	4020
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ccgtcacctc ataacgtgca tcatgcatgc cctgacaaca tggaacatcg ctatttttct	4260
gaagaattat gctcgttggg ggtatgcgcg gcaattgcag ctattgcaa catcgaacta	4320
cccctcacgc atgcattcat caatattatt catgcgggga aaggcaagat taatccaact	4380
ggcaaatcat ccagcgtgat tggtaacttc agttccagcg acttgattcg ttttgggtgct	4440
accacgttt tcaataagga cgagatggtg gagtaaagaa ggagtgcgtc gaagcagatc	4500
gttcaaacat ttggcaataa agtttcttaa gattgaatcc tgttgccggt cttgcgatga	4560
ttatcatata atttctgttg aattacgtta agcatgtaat aattaacatg taatgcatga	4620
cgttatttat gagatgggtt tttatgatta gagtcccgcg attatacatt taatacgca	4680
tagaaaacaa aatatagcgc gcaaaactagg ataaattatc gcgcgcggtg tcatctatgt	4740
tactagatcg atcaaaacttc ggtactgtgt aatgacgatg agcaatcgag aggctgacta	4800
acaaaaggta catcggtcga cgagctc	4827

Figure 2

(1.3-kb SAMS - soy mutant ALS - soy ALS-3')-region from pZSL13

tctagatcaa actcacatcc aaacataaca tggatatctt ccttaccaat cataactaatt	60
atthttgggtt aaatattaat cattatthttt aagatattaa ttaagaaatt aaaagatttt	120
ttaaaaaaat gtataaaaatt atattattca tgattthttca tacatttgat tttgataata	180
aatatatttt ttttaatttc ttaaaaaatg ttgcaagaca cttattagac atagtcttgt	240
tctgtttaca aaagcattca tcatttaata cattaaaaaa tatttaatac taacagtaga	300
atcttcttgt gagtgggtgt ggagtaggca acctggcatt gaaacgagag aaagagagtc	360
agaaccagaa gacaaataaa aagtatgcaa caaacaatc aaaatcaaag ggcaaaggct	420
ggggttggct caattgggtg ctacattcaa ttttcaactc agtcaacggg tgagattcac	480
tctgacttcc ccaatctaag ccgcggtatgc aaacgggtga atctaaccga caatccaatc	540
tcgttactta ggggctthttc cgtcattaac tcacccctgc caccgggttt ccctataaat	600
tggaactcaa tgctccctc taaactcgtc tcgcttcaga gttgagacca agacacactc	660
gtcatatat ctctctgctc ttctcttctc ttctacctct caaggtaact ttcttctccc	720
tctaccaaat cctagattcc gtggttcaat ttcggtatctt gcaacttctgg tttgctttgc	780
cttgctthttt cctcaactgg gtccatctag gatccatgtg aaactctact ctttctthta	840
tatctgcgga atacgcgttg gactttcaga tctagtcgaa atcatttcat aattgccttt	900
ctttctthta gcttatgaga aataaaatca cttthttthtt atthcaaaat aaaccttggg	960
ccttgtgctg actgagatgg ggtttggtga ttacagaatt ttagcgaatt ttgtaattgt	1020
acttgtttgt ctgtagthtt gthttgthtt cttgtthtct atacattct taggcttcaa	1080
thttattcga gtatagggtca caataggaat tcaaactttg agcaggggaa ttaatccctt	1140
ccttcaaact cagthttgtt gtatatatgt ttaaaaaatg aaactthttgc thtaaatct	1200
attataactt thtttatggc tgaaathttt gcatgtgtct ttgctctctg ttgtaaattt	1260
actgtttagg tactaactct aggttgttg tgcagthttt gaagtataac catgccacac	1320
aacacaatgg cggccaccgc ttccagaacc acccgattct cttcttctc ttcacacccc	1380
accttcccca aacgcattac tagatccacc ctccctctct ctcacaaac cctcaccaaa	1440
cccaaccacg ctctcaaaat caaatgttcc atctccaaac cccccacggc ggcgcccttc	1500
accaaggaag cgccgaccac ggagcccttc gtgtcacggg tcgcctccgg cgaacctcgc	1560

24724-10000
25770-10000

Figure 2 (continued)

aagggcgcg acatccttgt ggagggcgctg gagaggcagg gcgtgacgac ggtgttcgcg 1620
taccocggcg gtgcgtcgat ggagatccac caggcgctca cgcgctccgc cgccatccgc 1680
aacgtgctcc cgcgccacga gcagggcggc gtcttcgccc ccgaaggcta cgcgcgttcc 1740
tccggcctcc ccggcgctctg cattgccacc tccggccccg gcgccaccaa cctcgtgagc 1800
ggcctcgccc acgctttaat ggacagcgtc ccagtcgtcg ccataccgg ccaggtcgcc 1860
cgccggatga tcggcaccga cgccttccaa gaaacccccg tcgtggaggt gacgagatcc 1920
atcacgaagc acaactacct catcctcgac gtgcagcaca tcccccgct cgtcgccgag 1980
gctttcttcg tcgccacctc cggccgcccc ggtccggctc tcatcgacat tcccaaagac 2040
gttcagcagc aactcgccgt gcctaattgg gacgagcccc ttaacctccc cggttacctc 2100
gccaggctgc ccaggcccc cgcgaggcc caattggaac acattgtcag actcatcatg 2160
gaggcccaaa agcccgttct ctacgtcggc ggtggcagtt tgaattccag tgctgaattg 2220
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gttactggga agcttgaggc ttttgctagt agggctaaga ttgttcacat tgatattgat 2460
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ttcccaaaca tgctcaagtt tgctgatgct tgtgggatac cggcagcgcg agtgacgaag 3120
aaggaagagc ttagagcggc aattcagaga atgttgaca ccctggccc ctaccttctt 3180

Figure 2 (continued)

gatgtcattg tgcccatca ggagcatgtg ttgccgatga ttcccagtaa tggatccttc 3240
aaggatgtga taactgaggg tgatggtaga acgaggtact gattgcctag accaaatgtt 3300
ccttgatgct tgttttgtac aatatatata agataatgct gtcctagttg caggatttgg 3360
cctgtgggtga gcatcatagt ctgtagtagt tttggtagca agacatttta ttttcctttt 3420
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ttggagctca cctaggcaat cagtaaaatg catattcctt ttttaacttg ccatttattt 3720
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acaaaacgtc tcttttgctc gatcttcaca aagcgatacc gaaatccaga gatagttttc 3840
aaaagtcaga aatggcaaag ttataaatag taaaacagaa tagatgctgt aatcgacttc 3900
aataacaagt ggcacacgt ttctagttct agaccggg 3939

Figure 3

(2.1-kb SAMS - *Arabidopsis* mutant ALS - *Arabidopsis* ALS 3')
region from pZSL14

```

atcgatagag acatgttatt cacaaacat aaaatgatgg ctaaaattgg tgtgattgga      60
acgatatctg tttattatga tttcagggcg caaaaatgcg agtacttaat aaaattttac    120
atttaaatta gaattttttt tatcaataaa tattaattta ttagttttat tagaaatatt    180
aattagaaaa ttttgaatcc ccgatttctc ctctttttct tcgctattca tcattttcta    240
accaaaccac tcttatatgt tcttcaaatt agaacttgaa attattaatt ataattaaac    300
tgaaaacaat ttggtatcaa ttcatatata tgcttagtaa taaaatgcga taattaattg    360
ataaatctgc aaaagatttt acaaatatct ttcagaaaaa attaataaca aattttgtcg    420
ttttcatggt gttggtctga ggaggatttg gcactatana nctctctac ggaccattct    480
ttgcacttca actaaacgat ggtcagaatt ggtggggatt ttatattcaa gcatatccct    540
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atttttaacc cctaaacagt aaatttgaag gacaaaaata atatttttca aatttgatan    660
actatTTTTT ttttgaatt tgacgaacca aaaccagatt tatcctgaat tttaggaacc    720
acagatgtna ctaaaccaat atttatttat tttctaaaac aaaatttcat ggcagcatgc    780
ctcagcccat gaaaaaaacc ttataaaaat atctacacat tgaccattga aaagtctggt    840
ctcccatggg taaccagatc aaactcacat ccaaacataa catggatatc tccttaccaa    900
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gaaagagagt cagaaccaga agacaaataa aaagtatgca acaaacaat caaaatcaaa   1260
gggcaaaggc tgggggttggc tcaattgggt gctacattca attttcaact cagtcaacgg   1320
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acaatccaat ctctgtactt aggggctttt ccgtcattaa ctacccctg ccaccgggtt   1440
tccctataaa ttggaactca atgctcccct ctaaactcgt atcgcttcag agttgagacc   1500
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```

Figure 3 (continued)

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Figure 3 (continued)

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gctttataat gaatgtgcaa gagctagcca ctattcgtgt agagaatctt ccagtgaagg 3840
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aaaaaaaaaa aaatctcaac tcaacactaa attattttta tgtataaaag atgcttaaaa 4800

Figure 3 (continued)

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ggaaatccag aagcactaat cagacattgg aagtaggaat atttcaaaaa gttttttttt	4980
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tttaataaac aaaagaaatt ttttatattt tttcatttct tttccagca tgaggttatg	5100
atggcaggat gtggatttca tttttttcct ttgatagcc ttttaattga tctattataa	5160
ttgacgaaaa aatattagtt aattatagat atattttagg tagtattagc aatttacact	5220
tccaaaagac tatgtaagtt gtaaatatga tgcgttgatc tttcatcat tcaatggta	5280
gtcaaaaaaa taaaagctta actagtaaac taaagtagtc aaaaattgta cttagttta	5340
aatattaca tgaataatcc aaaacgacat ttatgtgaaa caaaaacaat atctagagga	5400
tccccggg	5408

pZSL11



pZSL12

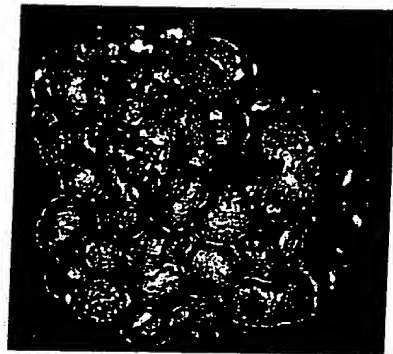


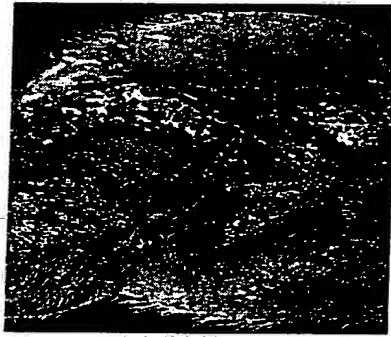
Figure 4. GUS Expression in Soybean Embryogenic Cell Lines Transformed with pZSL11 or pZSL12.

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Suspension Culture



Leaf+Stem



Root

Figure 5. GUS Expression in Soybean Transformed with pZSL11.